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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,466	09/10/2003	Eugene L. Shaw	7248.3001.001	4965

7590 12/10/2004  
William J. Schramm  
Reising, Ethington, Barnes, Kisselle, P.C.  
P.O. Box 4390  
Troy, MI 48099

EXAMINER
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STAFIRA, MICHAEL PATRICK


ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	Applicant(s)	
10/659,466	SHAW ET AL. 	
Examiner	Art Unit	
Michael P. Stafira	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/10/2003</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

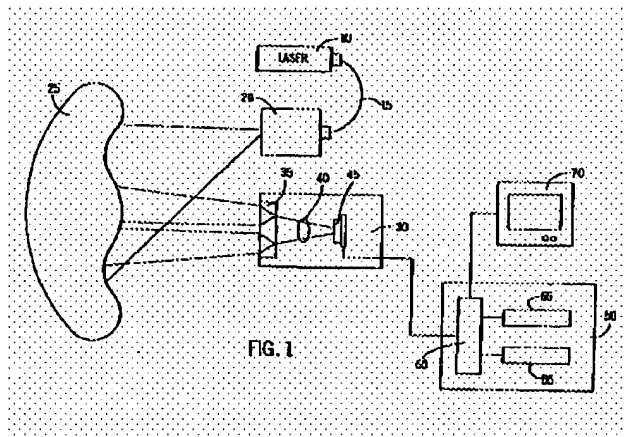
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 are rejected under 35 U.S.C. 102(e) as being anticipated by Lindsay et al. ('695).

#### **Claim 1**

Lindsay et al. ('695) discloses a source of coherent light (Fig. 1, Ref. 10) to shine the light directly onto the tire surface (Fig. 1, Ref. 25) with the light being reflected from the tire (See Fig. 1); a stressing apparatus, which can stress the tire (Col. 5, lines 54-67); a reflected light receiving apparatus (Fig. 1, Ref. 30) for receiving the light reflected directly from the tire when the tire is in a stressed and unstressed condition (Col. 5, lines 1-11, 20-24); a processor (Fig. 1, Ref. 60), which compares images of reflected light from the reflected light receiving apparatus when the tire is stressed and unstressed thereby ascertaining an anomaly in the tire and which generates an output from the comparison (Col. 5, lines 5-11); and a display apparatus electronically connected to the processor for displaying the output from the processor (Col. 5, lines 5-11).

**Claim 2**

Lindsay et al. ('695) discloses wherein the light does not pass through a birefringent material or a shearing optic material (Col. 4, lines 40-45).

**Claim 3**

The reference of Lindsay et al. ('695) further discloses the source of light is a laser (Col. 4, lines 29-30).

**Claim 4**

Lindsay et al. ('695) further discloses a diffuser (Fig. 1, Ref. 20) placed between the source of light (Fig. 1, Ref. 10) and the tire (Fig. 1, Ref. 25) to distribute the light over a portion of the tire surface.

**Claim 5**

The reference of Lindsay et al. ('695) further discloses a diffuser (Fig. 1, Ref. 20) placed between the source of light (Fig. 1, Ref. 10) and the tire (Fig. 1, Ref. 25) to distribute the light over a portion of the tire with even distribution.

**Claim 6**

Lindsay et al. ('695) discloses the reflected light receiving apparatus is a camera (Col. 4, lines 45-47).

**Claim 7**

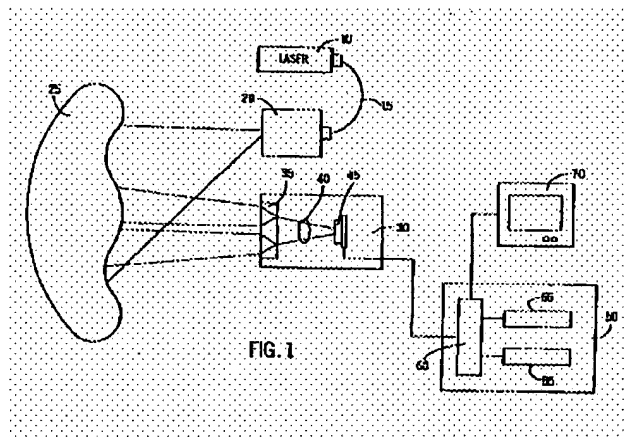
The reference of Lindsay et al. ('695) further discloses the camera is electronically connected to a computer (Col. 4, lines 48-51).

**Claim 8**

Lindsay et al. ('695) discloses the processor is software operating in a computer, which displays the output (Col. 4, lines 54-55, 65-67).

**Claim 9**

Lindsay et al. ('695) discloses providing a source of coherent light (Fig. 1, Ref. 10); shining the light directly onto the tire surface (Fig. 1, Ref. 25), thereby generating a reflected light from the tire; stressing the tire (Col. 5, lines 1-11); providing a reflected light receiving apparatus (Fig. 1, Ref. 30) for receiving the light reflected directly from the tire when the tire is in a stressed and unstressed condition (Col. 5, lines 1-11, 20-23); providing a processor (Fig. 1, Ref. 60) which views and compares images reflected light from the reflected light receiving apparatus when the tire is stressed and unstressed thereby ascertaining an anomaly in the tire and generates an output from the comparison (Col. 5, lines 5-11); and displaying (Fig. 1, Ref. 70), from apparatus electronically connected to the processor, the output from the processor (Col. 5, lines 5-11).

**Claim 10**

Lindsay et al. ('695) discloses wherein the light does not pass through a birefringent material or a shearing optic material (Col. 4, lines 40-45).

**Claim 11**

The reference of Lindsay et al. ('695) further discloses the source of light is a laser (Col. 4, lines 29-30).

**Claim 12**

Lindsay et al. ('695) further discloses a diffuser (Fig. 1, Ref. 20) placed between the source of light (Fig. 1, Ref. 10) and the tire (Fig. 1, Ref. 25) to distribute the light over a portion of the tire surface.

**Claim 13**

The reference of Lindsay et al. ('695) further discloses a diffuser (Fig. 1, Ref. 20) placed between the source of light (Fig. 1, Ref. 10) and the tire (Fig. 1, Ref. 25) to distribute the light over a portion of the tire with even distribution.

**Claim 14**

Lindsay et al. ('695) discloses the reflected light receiving apparatus is a camera (Col. 4, lines 45-47).

**Claim 15**

The reference of Lindsay et al. ('695) further discloses the camera is electronically connected to a computer (Col. 4, lines 48-51).

**Claim 16**

Lindsay et al. ('695) discloses the processor is software operating in a computer, which displays the output (Col. 4, lines 54-55, 65-67).

**Claim 17**

Lindsay et al. ('695) discloses the product of the method of claim 9 (Col. 5, lines 12-34).

**Claim 18**

Lindsay et al. ('695) discloses an image of an anomaly of a tire comprising the output from a computer (Col. 5, lines 11-34) wherein the output is from a reflected diffused beam of a source of coherent light shown directly onto a tire surface which tire surface has had the light shown on it when the tire is in a stressed and unstressed condition (Col. 5, lines 1-11, 20-23); an output is the result of comparing the reflected light shown onto the tire in a stressed and unstressed condition or in multiple stressed conditions (Col. 5, lines 1-45); and the output is characterized as a single image of the anomaly obtained from the diffused beam of coherent light shown onto the tire (Col. 5, lines 35-45).

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**Claim 19**

Lindsay et al. ('695) discloses the light does not pass through a birefringement material or a shearing optic material (Col. 4, lines 38-45).

**Claim 20**

The reference of Lindsay et al. ('695) further discloses scaled to size the anomaly in the tire (Col. 7, lines 50-60).

**Claim 21**

Lindsay et al. ('695) discloses the image is characterized as a scattered speckle reflection (Col. 4, lines 30-35).

**Claim 22**

The reference of Lindsay et al. ('695) further discloses the source of light (Fig. 1, Ref. 10) is passed through a diffuser (Fig. 1, Ref. 20) before the light shines on the tire surface (Fig. 1, Ref. 25).

**Claim 23**

Lindsay et al. ('695) discloses the output is black on white or white on black (Col. 11, lines 5-29).

**Claim 24**

Lindsay et al. ('695) further discloses the output is in multiple colors to enhance visibility of the image (Col. 10, lines 26-62).

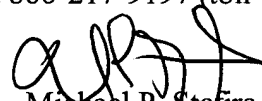


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Michael P. Stafira  
Primary Examiner  
Art Unit 2877

December 7, 2004